

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  P189344.WO.05	<b>FOR FURTHER ACTION</b>	
International application No.  PCT/US2010/024140	International filing date (day/month/year)  12/02/2010	(Earliest) Priority Date (day/month/year)  12/02/2009
Applicant  OSTEOTECH, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 6 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

the international application in the language in which it was filed  
 a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b.  This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c.  With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2.  **Certain claims were found unsearchable** (See Box No. II)

3.  **Unity of invention is lacking** (see Box No III)

4. With regard to the **title**,

the text is approved as submitted by the applicant  
 the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant  
 the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 12e

as suggested by the applicant  
 as selected by this Authority, because the applicant failed to suggest a figure  
 as selected by this Authority, because this figure better characterizes the invention

b.  none of the figures is to be published with the abstract

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61F2/28	A61F2/44	A61L27/36	A61L27/54	A61F2/46
A61L2/02	A61L2/03	A61L2/04	A61L2/08	A61L2/14

ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61F A61L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/249464 A1 (BINDSEIL JAMES J [US]; ET AL) 9 December 2004 (2004-12-09) figures 1,5,6,8 paragraphs [0010], [0 14], [0015], [0024], [0025] -----	1-5,8, 12-14
X	EP 0 621 020 A1 (SULZER MEDIZINALTECHNIK AG [CH]) 26 October 1994 (1994-10-26) figure 1 page 3, lines 29-47 -----	15
X	WO 01/70136 A2 (SYNTHERS USA [US]; SYNTHERS AG [CH]; BOYER MICHAEL L II [US]; PAUL DAVID) 27 September 2001 (2001-09-27) figures 13,14,16 page 11, lines 4-16 page 15, lines 1-5 page 19, lines 6-29 -----	1-5,7, 12,14
	-/-	

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

27 April 2010

Date of mailing of the international search report

07/05/2010

Name and mailing address of the ISA/

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## C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007/162132 A1 (MESSERLI DOMINIQUE [US]) 12 July 2007 (2007-07-12) figures 1,5,10c,12 paragraphs [0051], [0053], [0061], [0093], [0095] -----	1-5,7, 12,14,15
X	US 2001/031254 A1 (BIANCHI JOHN R [US] ET AL) 18 October 2001 (2001-10-18) figures 1,3,7,21 paragraphs [0030], [0031], [0037], [0049] paragraph [0036] -----	1,2,5, 7-12,14

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2010/024140

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-14

Delivery system configured to retain bone growth substance with at least two types of segments: first type comprising a covering material defining a compartment that retains bone growth substance and second type configured to connect segments of first type. (claim 1) and delivery system comprising bone growth substance within a covering material configured to fit an irregular bone void, with the volume of said bone growth substance being less than the maximum volume of the compartment (defined by said covering material) (claim 12).

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2. claim: 15

Tool for grasping and placing a delivery system with a handle and a plunger.

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## Information on patent family members

International application No

PCT/US2010/024140

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 2004249464	A1	09-12-2004	AU	2004245088 A1		16-12-2004
			CA	2528204 A1		16-12-2004
			CN	101056597 A		17-10-2007
			EP	1633285 A2		15-03-2006
			JP	4358855 B2		04-11-2009
			JP	2007526005 T		13-09-2007
			KR	20060027324 A		27-03-2006
			WO	2004108019 A2		16-12-2004
EP 0621020	A1	26-10-1994	AU	673052 B2		24-10-1996
			AU	6052094 A		27-10-1994
			CA	2121001 A1		22-10-1994
			CN	1096440 A		21-12-1994
			CZ	9400946 A3		16-11-1994
			FI	941831 A		22-10-1994
			HU	67437 A2		28-04-1995
			JP	6319760 A		22-11-1994
			NO	941428 A		24-10-1994
			US	5702454 A		30-12-1997
			US	5755797 A		26-05-1998
WO 0170136	A2	27-09-2001		NONE		
US 2007162132	A1	12-07-2007	AU	2006330939 A1		05-07-2007
			CA	2634762 A1		05-07-2007
			EP	1962705 A2		03-09-2008
			JP	2009521279 T		04-06-2009
			KR	20080085058 A		22-09-2008
			WO	2007076049 A2		05-07-2007
US 2001031254	A1	18-10-2001		NONE		